

INSTRUCTIONS-PARTS LIST



308-510

Rev A

This manual contains **IMPORTANT**
WARNINGS and **INSTRUCTIONS**
READ AND RETAIN FOR REFERENCE

HYDRA-CLEAN® 1840, 2540, 3240 Pressure Washer

Model 800-270, Series A 230/460 Volt, 3 Phase
Model 800-294, Series A 230 Volt, 1 Phase

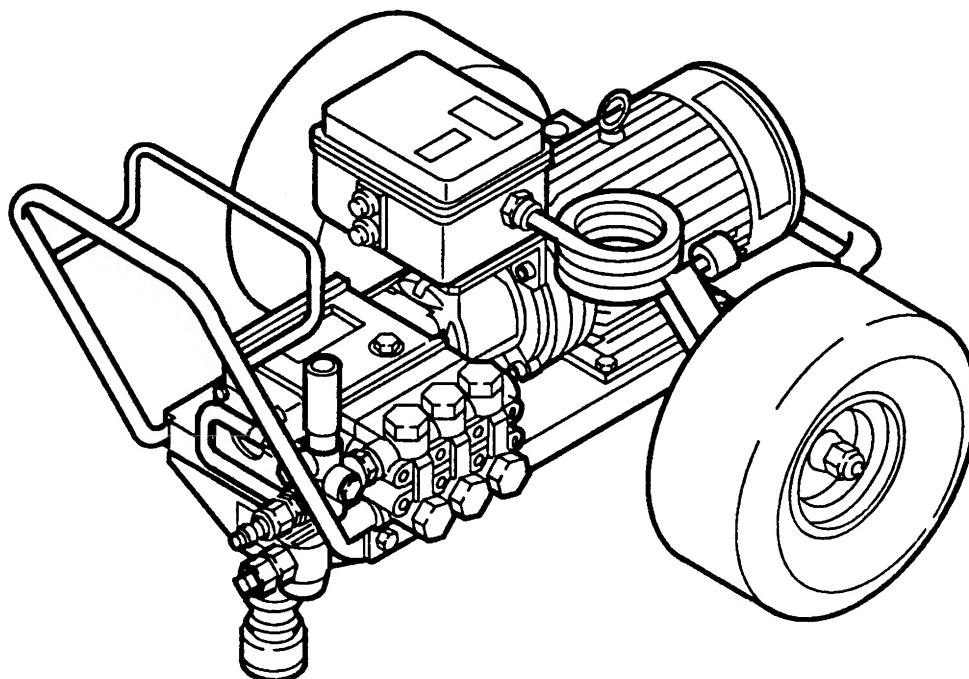
1850 psi (128 bar) OPERATING PRESSURE
2300 psi (159 bar) MAXIMUM WORKING PRESSURE

Model 800-349, Series A 230/460 Volt, 3 Phase

2500 psi (172 bar) OPERATING PRESSURE
2900 psi (200 bar) MAXIMUM WORKING PRESSURE

Model 800-350, Series A 230/460 Volt, 3 Phase

3200 psi (220 bar) OPERATING PRESSURE
3400 psi (235 bar) MAXIMUM WORKING PRESSURE



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WARNING

**HIGH PRESSURE SPRAY CAN CAUSE SERIOUS INJURY.
FOR PROFESSIONAL USE ONLY. OBSERVE ALL WARNINGS.**

Read and understand all instruction manuals before operating equipment.

FLUID INJECTION HAZARD

General Safety

This pressure washer generates very high fluid pressure. Spray from the gun, leaks or ruptured components can inject fluid through your skin and into your body and cause extremely serious bodily injury including the need for amputation. Also, fluid injected or splashed into the eyes or on the skin can cause serious damage.

NEVER point the spray gun or wand at anyone or at any part of the body. **NEVER** put hand or fingers over the spray tip.

ALWAYS follow the **Pressure Relief Procedure**, before cleaning or servicing any part of the sprayer.

NEVER try to stop or deflect leaks with your hand or body.

Be sure equipment safety devices are operating properly before each use.

Medical Treatment

If any fluid appears to penetrate your skin, get **EMERGENCY MEDICAL TREATMENT AT ONCE. DO NOT TREAT AS A SIMPLE CUT.** Tell the doctor exactly what fluid was injected.

NOTE TO PHYSICIAN: *Injection in the skin is a traumatic injury. It is important to treat the injury surgically as soon as possible. Do not delay treatment to research toxicity. Toxicity is a concern with some exotic coatings injected directly into the bloodstream. Consultation with a plastic surgeon or reconstructive hand surgeon may be advisable.*

Pressure Relief Procedure

To reduce the risk of serious bodily injury, including fluid injection and splashing in the eyes, or on the skin, always follow this procedure whenever you stop spraying for more than 10 minutes, when shutting down, and before checking or repairing any part of the system.

1. Engage the trigger safety latch.
2. Turn the sprayer off.
3. Disconnect the electrical supply.
4. Shut off the water supply.
5. Disengage the trigger safety latch and trigger the gun to relieve pressure, and then engage the trigger safety latch again.
6. Before long-term (overnight) storage, disconnect the water supply and disconnect the electricity.

Spray Gun Safety Devices

Be sure all gun safety devices are operating properly before each use. Do not remove or modify any part of the gun; this can cause a malfunction and result in serious bodily injury.

SAFETY LATCH: Whenever you stop spraying for a moment, always set the gun safety latch in the engaged or "safe" position, making the gun inoperative. Failure to properly set the safety latch can result in accidental triggering of the gun.

SPRAY TIP SAFETY: Use extreme caution when cleaning or changing spray tips. If a spray tip clogs while spraying, engage the gun safety latch immediately. **ALWAYS** follow the **Pressure Relief Procedure** and then remove the spray tip to clean it.

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This equipment is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER

Improper connection of the equipment-grounding conductor can result in the risk of electrocution. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the product—if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

GROUND FAULT CIRCUIT INTERRUPTER PROTECTION

To comply with the National Electrical Code (NFPA 70) and to provide additional protection from the risk of electric shock, connect this pressure washer to a

receptacle that is protected by a ground-fault circuit-interrupter (GFCI).

EXTENSION CORDS

Use only 4-wire extension cords that have 4-prong grounding-type plugs and 4-pole cord connectors that accept the plug from the product. The single phase model 1840 (800-294) uses a 3-wire extension cord with a 3-prong grounding type plug and 3-pole cord connector. Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking "Acceptable for use with outdoor appliances; store indoors while not in use." Use only extension cords having an electrical rating not less than the rating of the product. Do not use damaged extension cords. Examine extension cord before using and replace if

damaged. Do not abuse extension cord and do not yank or pull on any cord to disconnect. Keep cord away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.

WARNING

To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands.

EQUIPMENT MISUSE HAZARD

General Safety

Any misuse of the pressure washer or accessories, such as overpressurizing, modifying parts, using incompatible chemicals and fluids, or using worn or damaged parts, can cause them to rupture and result in fluid injection, splashing in the eyes or on the skin, or other serious bodily injury, fire, explosion or property damage.

NEVER alter or modify any part of this equipment; doing so could cause it to malfunction.

CHECK all spray equipment regularly and repair or replace worn or damaged parts immediately.

ALWAYS wear protective eyewear and appropriate clothing. If using a chemical injector, read and follow the chemical manufacturer's literature for recommendations on additional protective equipment, such as a respirator.

System Pressure

This sprayer can develop high operating pressure. Be sure that all spray equipment and accessories are rated to withstand the maximum working pressure of this sprayer. **DO NOT** exceed the maximum working pressure of any component or accessory used in the system.

Chemical Compatibility

BE SURE that all chemicals used in the chemical injector are compatible with the wetted parts of the hose, gun, wand and tip, as given in the Technical Data (inside back cover). Always read the chemical manufacturer's literature before using any chemical in this pressure washer.

HOSE SAFETY

High pressure fluid in the hoses can be very dangerous. If the hose develops a leak, split or rupture due to any kind of wear, damage or misuse, the high pressure spray emitted from it can cause a fluid injection injury or other serious bodily injury or property damage.

ALL FLUID HOSES MUST HAVE STRAIN RELIEFS ON BOTH ENDS. The strain reliefs help protect the hose from kinks or bends at or close to the coupling, which can result in hose rupture.

TIGHTEN all fluid connections securely before each use. High pressure fluid can dislodge a loose coupling or allow high pressure spray to be emitted from the coupling.

NEVER use a damaged hose. Before each use, check entire hose for cuts, leaks, abrasion, bulging cover, or damage or movement of the hose couplings. If any of these conditions exist, replace the hose immediately. **DO NOT** try to recouple high pressure hose or mend it with tape or any other device. A repaired hose cannot contain the high pressure fluid.

HANDLE AND ROUTE HOSES CAREFULLY. Do not pull on hoses to move the pressure washer. Do not use chemicals which are not compatible with the inner tube and cover of the hose. **DO NOT** expose Graco hose to temperatures above 200° F (93° C) or below -40° F (-40° C).

MOVING PARTS HAZARD

Moving parts can pinch or amputate fingers or other body parts. **KEEP CLEAR** of moving parts when starting or operating the pressure washer.

NEVER operate the pressure washer without all guards and interlocks installed and functioning. Follow the

Pressure Relief Procedure before checking or servicing the pressure washer to prevent discharging high pressure fluid from the gun.

TERMS

WARNING or DANGER: Alerts user to avoid or correct conditions that could cause bodily injury.

CAUTION: Alerts user to avoid or correct conditions that could cause damage to or destruction of equipment.

NOTE: Identifies helpful procedures and information.

IMPORTANT

United States Government safety standards have been adopted under the Occupational Safety and Health Act. These standards—particularly the General Standards, Part 1910, and the Construction Standards, Part 1926—should be consulted.

INSTALLATION

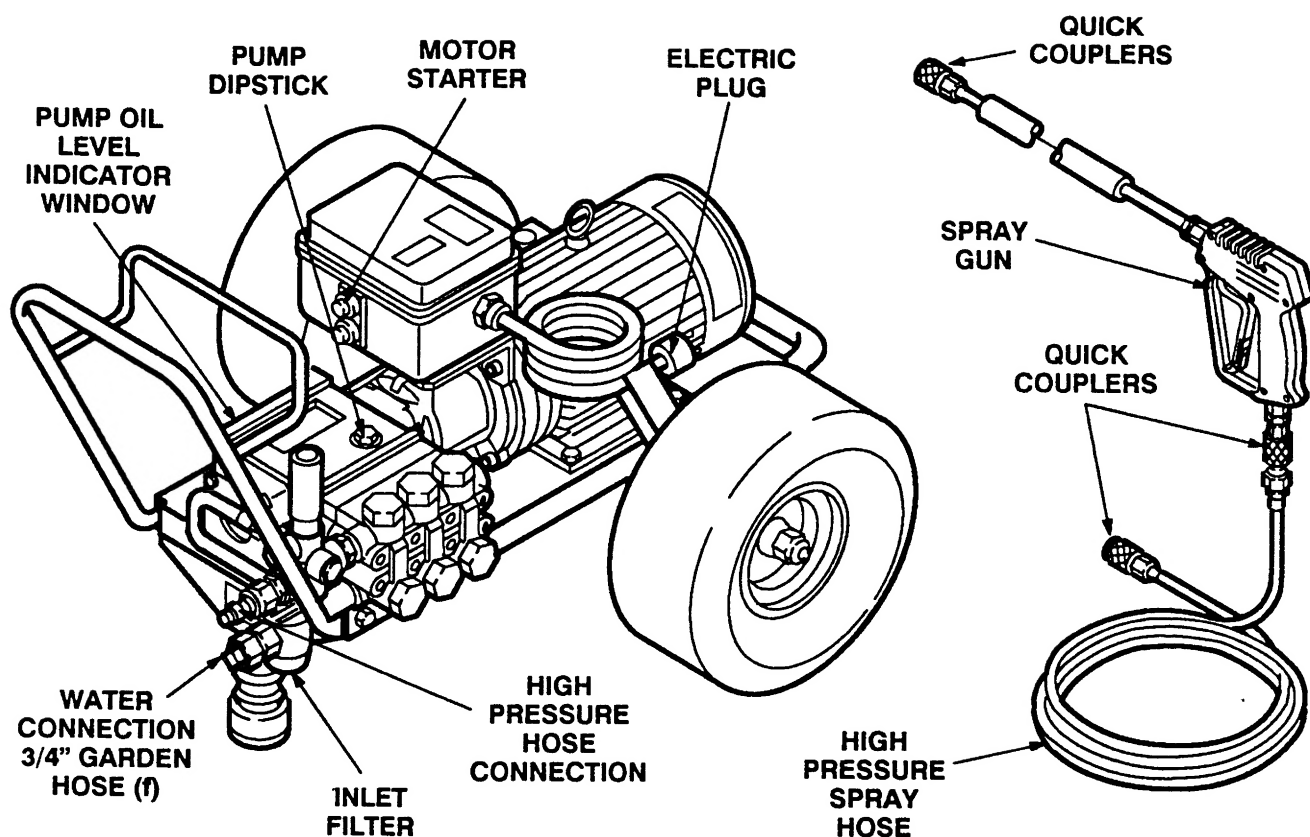


Figure 1

Check for Shipping Damage

Check the unit for any damage that may have occurred in shipping. Note any damage and **notify the carrier immediately**.

Set Up

Before plugging in the unit, be sure the electrical service matches the specification in Technical Data (inside back cover) and the voltage label on the unit. With the unit off, plug the power supply cord into a grounded, GFCI-protected outlet. Do not remove the electrical plug which comes with the unit or bend connecting prongs to fit an improper outlet! Use an extension cord that meets the requirements of the **EXTENSION CORD** section and is no more than 100 ft (30 m) long. Added length of cord will affect current draw of unit.

If you are using a downstream chemical injector, install it between the pump unloader and the high pressure hose, using the quick couplers provided.

Connect the high pressure hose between the pump outlet and the gun inlet. Both of these connections are made with quick couplers.

CAUTION

Up to 100 ft (30 m) of high pressure hose may be used. Longer hoses may affect sprayer performance, and chemical injector performance, if used.

Install the appropriate spray tip on the wand. See **Installing and Changing Spray Tips**. If you are using a sandblaster kit, see its separate manual for installation instructions.

Connect to Water Supply

CAUTION

Before attaching to the water supply, check your local plumbing code regarding cross-connection to the water supply.

A backflow preventer P/N 801-133 is available to prevent backflow of contaminated water into the fresh water supply. Install it upstream from the pump.

Install a regulating water valve, P/N 800-258, if inlet water pressure is over 60 psi (4.1 bar).

Do not exceed 160° F (70° C) inlet water temperature.

Connect a hose with at least a 3/4 inch (19 mm) ID and not longer than 50 ft (15 m) to the unit's 3/4 inch garden hose inlet.

NOTE: The water source at the unit *must* have a minimum flowrate equal to that of the unit (see Technical Data, inside back cover).

STARTUP

Use this procedure whenever starting the pressure washer to help insure that the unit is ready to operate and starting is done safely.

1. Check the oil level.

Pump: Add SAE 20 or 30 weight non-detergent oil as necessary.

2. Turn on the water supply.

CAUTION

Never run the unit dry. Costly damage to the pump will result. Always be sure the water supply is completely turned on before operating.

3. Trigger the gun until water sprays from the tip indicating that the air is purged from the system.
4. Plug the electrical cord into proper, grounded, GFCI-protected outlet.
5. **ALWAYS** engage the gun's trigger safety latch whenever you stop spraying, even for a moment to reduce the risk of fluid injection or splashing in the eyes or on the skin if the gun is bumped or triggered accidentally.
6. Most pressure washer spraying is done at full pressure. On the 1840 models there is an adjustable unloader valve that permits operation at less than maximum pressure. To reduce pressure, for special cleaning applications, turn the pressure control

knob on the unloader counterclockwise, as needed. On the 2540 model and 3240 model the unloader is factory-set at full pressure and is not adjustable.

7. **ALWAYS** observe the following **CAUTIONS** to avoid costly damage to the pressure washer.

CAUTION

DO NOT allow the pressure washer to idle for more than 10 minutes. Doing so may cause the recirculating water to overheat and seriously damage the pump. Turn off the pressure washer if it will not be spraying or cleaning at least every 10 minutes. If heated inlet water is used, reduce this time further.

DO NOT run the pump dry, which will quickly damage the pump. Be sure the water supply is fully turned on before starting the pump.

DO NOT operate the pressure washer with the inlet water screen removed. This screen helps keep abrasive sediment out of the pump, which could clog or scratch the pump. Keep this screen clean.

DO NOT pump caustic materials; such materials may corrode the pump components.

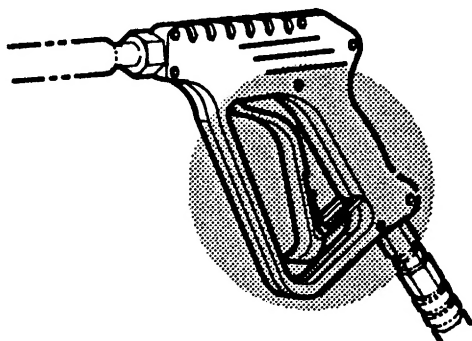
8. See the chemical injector or sandblaster kit manual for detailed cleaning information if these accessories are used.

Trigger Safety Latch

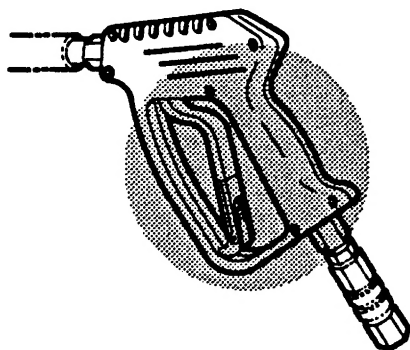
WARNING

To reduce the risk of serious bodily injury, including fluid injection, splashing in the eyes or on the skin, **ALWAYS** engage the trigger safety latch whenever spraying stops, even for a moment.

In the engaged position, the trigger safety latch prevents the gun from being triggered accidentally by hand or if it is dropped or bumped. Be sure the latch is pushed fully down when engaging it or it cannot prevent the gun from being triggered. See Figure 2.



TRIGGER SAFETY LATCH SHOWN ENGAGED



TRIGGER SAFETY LATCH SHOWN DISENGAGED

Figure 2

Installing and Changing Spray Tips

WARNING

To reduce the risk of serious bodily injury, including fluid injection or splashing in the eyes or onto the skin, use extreme caution when changing spray tips. **ALWAYS** follow the procedure below.

1. Follow the **Pressure Relief Procedure**.
2. Point the gun and wand away from yourself and anyone else.
3. Without holding your hand over the spray tip (A), pull back the quick coupler ring (B), remove the tip and then release the ring. See Figure 3.
4. Be sure the tip is secure before starting to spray again.
5. Tip holding holes are provided on the chassis.

CAUTION

To avoid blowing the o-ring out of the quick coupler, due to the high pressure in the system, never operate the pressure washer without a tip securely mounted in the quick coupler.

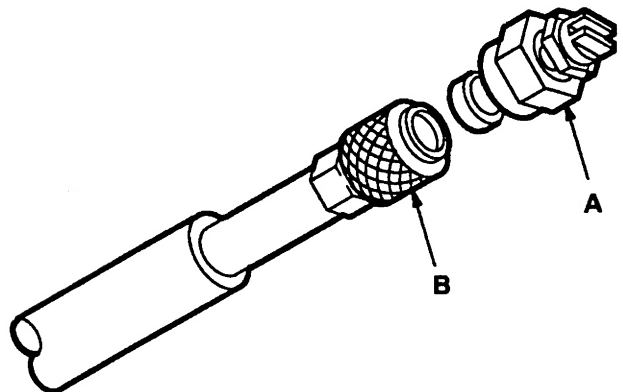


Figure 3

SHUTDOWN, FLUSHING AND STORAGE

WARNING PRESSURE RELIEF PROCEDURE

To reduce the risk of serious bodily injury, including fluid injection and splashing in the eyes, or on the skin, always follow this procedure whenever you stop spraying for more than 10 minutes, when shutting down, and before checking or repairing any part of the system.

1. Engage the trigger safety latch.
2. Turn the sprayer off.
3. Disconnect the electrical supply.
4. Shut off the water supply.
5. Disengage the trigger safety latch and trigger the gun to relieve pressure, and then engage the trigger safety latch again.
6. Before long-term (overnight) storage, disconnect the water supply and disconnect the electricity.

1. If the pressure washer will be exposed to freezing temperatures, drain all water out of the pump. If it must be stored in freezing temperatures, flush the unit with a 50% anti-freeze solution. Relieve pressure. Flush the pressure washer before using it again to remove the anti-freeze.

NOTE: An anti-freeze flush kit P/N 802-327 is available to make flushing easier.

CAUTION

If water does freeze in the pressure washer, thaw it in a warm room before trying to start it. **DO NOT** pour hot water on or into the pump; it may crack the ceramic plungers!

2. After each use, wipe all surfaces of the pressure washer with a clean, damp cloth.
3. Perform the appropriate maintenance. See the maintenance chart.

MAINTENANCE

Observing regular maintenance intervals helps ensure that you get maximum performance and life from the pressure washer.

There is a break-in period for the pump. After changing the oil initially, the interval between required changes is longer.

WARNING

To reduce the risk of serious bodily injury, including fluid injection, splashing in the eyes or on the skin or injury from moving parts, always follow the **Pressure Relief Procedure Warning** before proceeding.

Interval	What to do
Daily	Clean water inlet screen and filter. Check pump oil level. Fill as necessary.
After first 50 hours of operation	Change pump break-in oil. Use SAE 20 or 30 non-detergent oil.
Each 500 hours of operation or 6 months	Change pump oil. Use SAE 20 or 30 non-detergent oil.

TROUBLESHOOTING CHART

WARNING

To reduce the risk of serious bodily injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts, always follow the **Pressure Relief Procedure Warning** before proceeding.

PROBLEM	CAUSE	SOLUTION
Low pressure and/or pump runs rough	Worn or wrong size tip. Inlet filter clogged. Worn packings, abrasives in water or natural wear. Inadequate water supply. Coupling slippage. Fouled or dirty inlet or discharge valves. Even a small particle can cause the valve to stick. Restricted inlet. Worn inlet or discharge valves. Leaking high pressure hose.	Replace with tip of proper size. Clean. Check more frequently. Check filter. Replace packings. See PUMP SERVICE. Check water flow rate to pump. Tighten or replace. Clean inlet and discharge valve assemblies. Check filter. Check garden hose, may be collapsed or kinked. Replace worn valves. Replace high pressure hose.
Water leakage from under pump manifold	Worn packings.	Install new packings. See PUMP SERVICE.
Water in pump	Humid air condensing inside crankcase. Worn packings. Oil seals leaking.	Change oil as specified in MAINTENANCE. Install new packings. See PUMP SERVICE. Install new oil seals. See PUMP SERVICE.
Frequent or premature failure of the packings	Scored, damaged or worn plungers. Abrasive material in the fluid being pumped. Inlet water temperature too high. Overpressurizing pump. Excessive pressure due to partially plugged or damaged tip. Pump running too long without spraying. Running pump dry.	Install new plungers. See PUMP SERVICE. Install proper filtration on pump inlet plumbing. Check water temperature; may not exceed 160°F. Do not modify any factory-set adjustments. See EQUIPMENT MISUSE HAZARD. Clean or replace tip. See Installing and Changing Spray Tips. Never run pump more than 10 minutes without spraying. Do not run pump without water.
Strong surging at the inlet and low pressure on the discharge side	Foreign particles in the inlet or discharge valve or worn inlet and/or discharge valves.	Clean or replace valves. See PUMP SERVICE.
Unit will not start	Unit not plugged in. Electrical service off/GFCI activated. Thermal overload has tripped.	Check power cord. Check fuse/circuit breaker. Check for proper grounding. Press reset button on motor for 1 phase units. Press stop button on the motor starter for 3 phase units.

WARNING

To reduce the risk of serious bodily injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts, always follow the **Pressure Relief Procedure Warning** before proceeding.

NOTE: The following metric wrenches are needed: M10, M13 and M30. Repair kits are available. Refer to the individual repair sections and the pump parts page for more details. For the best results, use all parts in the kits.

NOTE: There are two different tool kits to aid in servicing the pump. P/N 800-298 is used to ease installation of packings. P/N 800-271 includes the items in 800-298 and tools to aid in the removal of packing retainers.

Valves

NOTE: For a set of six valves, order P/N 801-472.

1. Remove the hex plug from the manifold using an M30 wrench.
2. Examine the o-ring under the hex plug and replace it if it is cut or distorted.
3. Remove the valve assembly from the cavity; the assembly may come apart.
4. Install the new valve. Install the o-ring and hex plug; torque to 75 ft-lb (103 Nm).

NOTE: Retorque the plug after 5 hours of operation.

Pumping Section

1. Remove the eight capscrews and lockwashers from the manifold using an M13 wrench.
2. Carefully separate the manifold from the crankcase.

NOTE: It may be necessary to tap the manifold lightly with a soft mallet to loosen.

CAUTION

Keep the manifold properly aligned with the ceramic plungers when removing to avoid damage to the plunger or seals.

3. Carefully examine each plunger for any scoring or cracking and replace as necessary.

Servicing the Plungers

NOTE: Plunger repair kit, P/N 801-474 is available to replace retainers, o-rings, washers and backup rings for three cylinders.

1. Loosen the plunger retaining screw five to six turns, using an M10 wrench. Push the plunger towards the crankcase to separate the plunger and retaining screw.
 2. Remove the screw from the plunger and examine the o-ring, backup ring and copper bearing/gasket washer. Replace these parts if necessary using kit 801-474.
 3. Remove the plunger and flinger from the plunger shaft. Clean, examine and replace parts as necessary.
 4. Inspect the plunger shaft for oil leakage from the crankcase. If leaking is obvious, replace the oil seals. Otherwise, DO NOT remove these seals as they cannot be reused. An oil seal kit is available to replace the seals.
 5. Lightly grease the oil seal, if it is being replaced, and the flinger and replace them on the plunger shaft. Then install the plunger.
 6. Lightly grease the retaining screw and the outer end of the plunger. Place the washer, o-ring and backup ring around the screw and install the screw through the plunger. Torque to 14.4 ft-lb (19.5 Nm).
- NOTE:** If you plan to replace the packings, refer to Servicing the V-Packings.
7. Lubricate the outside of each plunger. Slide the manifold onto the crankcase, being careful not to damage the seals.
 8. Install the capscrews and washers finger-tight. Torque the screws to 21.7 ft-lb (29 Nm) following the tightening pattern (Figure 4). Uneven tightening may cause the manifold to bind or jam.

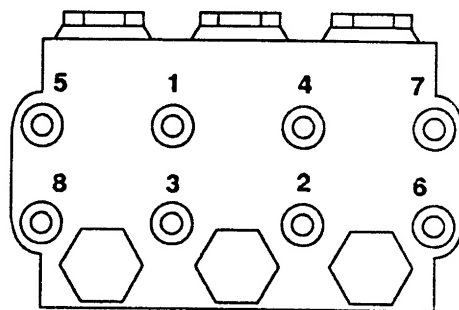


Figure 4

Servicing the V-Packings

NOTE: There are two types of packing kits: one is just packings, the other includes the packings, rings and retainers.

1. Remove the manifold as outlined in the Pumping Section.
2. Carefully pull the packing retainer from the manifold. Examine the o-ring and replace it if it is cut or damaged.
3. Remove the v-packing and head ring. Pull out the intermediate retainer ring. Remove the second v-packing and second head ring.
4. Inspect all parts and replace as necessary.

5. Thoroughly clean the packing cavities and examine.
6. Lightly grease the packing cavities and then replace the packings in the following order: head ring, v-packing, intermediate ring, head ring, v-packing and packing retainer with the o-ring installed in the retainer groove.

CAUTION

Be very sure the parts are installed in the proper order and facing the correct direction. See Pump assembly on page 18. Improperly installed parts will cause a malfunction.

7. Reassemble the manifold as instructed in Servicing the Plungers.

ACCESSORIES

(Must be purchased separately)

DOWNSTREAM CHEMICAL INJECTOR KIT (1840) 800-111

DOWNSTREAM CHEMICAL INJECTOR KIT (2540 & 3240) 800-117

For injecting harsh cleaning chemicals downstream from the pump.

UPSTREAM CHEMICAL INJECTOR KIT 800-257

For injecting mild cleaning chemicals upstream into the pump.

BACKFLOW PREVENTOR 801-133

Prevent back-up of contaminated water into fresh supply. Install upstream of pump.

WATER SANDBLASTING KIT 800-120

For abrasive cleaning of stubborn dirt and paint. Requires a spray tip which is not included in kit (801-666 for 1840, 801-667 for 2540, 803-107 for 3240).

ANTI-FREEZE FLUSH KIT 802-327

For flushing system with 50% anti-freeze solution prior to transporting or storing pressure washer in below freezing temperatures.

INLET PRESSURE REGULATOR 800-258

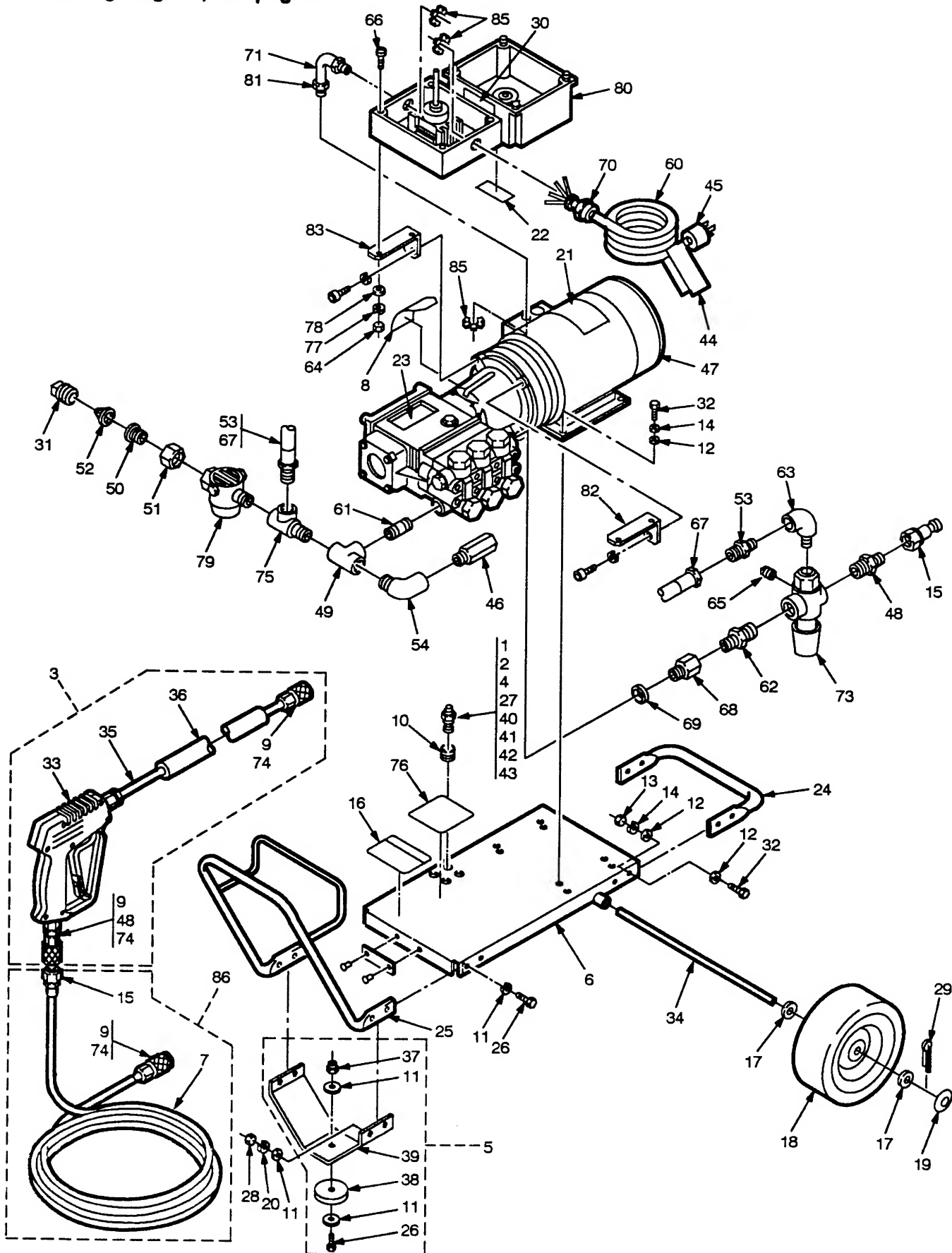
Regulates inlet water pressure to 60 psi (4 bar) maximum.

PARTS DRAWING

800-270 Hydra-Clean® 1840 Pressure Washer (3 phase)

800-294 Hydra-Clean® 1840 Pressure Washer (1 phase)

For wiring diagram, see page 16



PARTS LIST

800-270 Hydra-Clean® 1840 Pressure Washer (3 phase)

800-294 Hydra-Clean® 1840 Pressure Washer (1 phase)

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	800-134	TIP ASSEMBLY, 15 Degree (includes 4, 15)	1	47 †	800-343	PUMP & MOTOR ASSEMBLY (see page 17)	1
2	800-135	TIP ASSEMBLY, 0 Degree (includes 15, 27)	1	•	800-275	PUMP & MOTOR ASSEMBLY (see page 17)	1
3	800-394	GUN & WAND ASSEMBLY (includes 9, 33, 35, 36, 48)	1	48	801-103	NIPPLE, Hex 1/4 x 3/8	2
4	801-666	TIP, 15 Degree	1	49	801-106	TEE, 1/2	1
5	800-175	FRONT LEG ASSEMBLY (includes 11, 26, 37, 38, 39)	1	50	801-110	ADAPTER, Garden Hose	1
6	800-274	CHASSIS	1	51	801-111	NUT, Garden Hose	1
7	801-007	HOSE, High Pressure 50'	1	52	801-112	STRAINER, Garden Hose	1
8	801-008	LABEL, Graco G	2	53	802-627	NIPPLE, Hex 3/8 NPSM x 1/4 NPT	1
9	801-009	QUICK COUPLER, Female 1/4 (includes 74)	3	54	801-178	ELBOW, Street 1/2 x 90 Degree	1
10	801-548	GROMMET, Rubber	4	55	801-226	CONNECTOR, Wire	4
11	801-015	WASHER, Flat 3/8	10	56 •	801-228	WIRE, 14 AWG Black	18 in
12	801-023	WASHER, Flat 5/16	12	57 •	801-229	WIRE, 14 AWG White	18 in
13	801-024	NUT, Hex 5/16-18	4	58 •	801-303	WIRE, 14 AWG Green	18 in
14	801-025	WASHER, Lock 5/16	8	59	801-304	TERMINAL, Ring	1
15	801-090	QUICK COUPLER, Male 1/4	6	60 †	801-448	CORD, Power 10/3	8 ft
16	801-129	LABEL, Warning, chassis	1	•	801-382	CORD, Power 12/4	8 ft
17	801-235	WASHER, Flat 5/8	4	61	801-523	NIPPLE 1/2 x 2	1
18	106-062	WHEEL & TIRE ASSEMBLY	2	62	801-603	NIPPLE, Hex 3/8	1
19	104-811	HUB CAP	2	63	801-620	ELBOW, Street 1/4 x 90 Degree	1
20	801-363	WASHER, Lock 3/8	4	64	801-633	NUT, Hex #6-32	4
21	801-388	LABEL, Warning, grounding required	1	65	801-709	PLUG, Square Head 1/4	1
22	801-417	LABEL, Attention, relieve pressure	1	66	801-227	SCREW, Machine, pan hd #6-32 x 3/4	4
23	803-083	LABEL, Keep From Freezing	1	67	801-866	HOSE, Bypass (includes 53)	1
24	801-539	BUMPER	1	68	801-905	ADAPTER, 3/8 G x 3/8 NPT	1
25	801-541	HANDLE	1	69	801-907	WASHER, Flat	1
26	801-546	SCREW, Cap, hex hd 3/8-16 x 1-1/4	5	70 •	801-929	CONNECTOR, Sealtight 3/8 x 90 Degree	1
27	801-665	TIP, 0 Degree	1	71 †	801-488	CORD, Power 10/3	18 in
28	801-878	NUT, Hex, 3/8-16	4	•	801-930	CONDUIT, Sealtight 3/8	7 in
29	801-880	PIN, Cotter 1/8 x 1-1/2	2	72 •	802-314	WIRE, 14 AWG Red	18 in
30	801-902	LABEL, Caution 10 minute bypass	1	73	803-333	UNLOADER, 1850 psi	1
31	402-278	PLUG, Plastic	1	74	801-202	O-RING, Female Coupler 1/4	1
32	801-941	SCREW, Cap, hex hd 5/16-18 x 1	8	75	802-666	TEE, Street 1/2	1
33	803-350	GUN, Spray	1	76 †	801-445	LABEL, Caution, 230 volt 1 phase	1
34	802-139	AXLE	1	•	803-007	LABEL, Caution, 230 volt 3 phase	1
35	801-935	WAND, 20"	1	•	803-006	LABEL, Caution, 460 volt 3 phase	1
36	801-957	SLEEVE, 18"	1	77	802-731	WASHER, Lock #6	4
37	101-566	NUT, Lock 3/8-16	1	78	802-732	WASHER, Flat #6	4
38	801-504	BUMPER, Rubber	1	79	800-113	FILTER	1
39	801-858	BRACKET, Front Leg	1	80 †	802-804	SWITCH, 230 Volt 1 Phase	1
40	801-552	TIP, 25 Degree	1	•	803-255	SWITCH, Starter 230 Volt 3 Phase	1
41	800-060	TIP ASSEMBLY, 25 Degree (includes 15, 40)	1	•	803-256	SWITCH, Starter 460 Volt 3 Phase	1
42	800-061	TIP ASSEMBLY, 40 Degree (includes 15, 43)	1	81	802-811	CORD GRIP	3
43	801-553	TIP, 40 Degree	1	82 †	802-947	BRACKET, Switch Left	1
44	803-186	LABEL, Warning, cordset	1	•	803-263	BRACKET, Switch Left	1
45 †	802-850	PLUG, Locking, 230 volt 1 phase	1	83 †	802-948	BRACKET, Switch Right	1
•	802-996	PLUG, Locking, 230 volt 3 phase	1	•	803-262	BRACKET, Switch Right	1
•	802-993	PLUG, Locking, 460 volt 3 phase	1	84	801-221	TERMINAL, Ring	1
46	800-115	VALVE, Thermal Relief	1	85	801-937	NUT, Lock Electrical	1
				86	800-374	HOSE ASSEMBLY, w/Quick Couplers (includes 7, 9, 15)	1
				†	Model 1840	(800-294)	
				•	Model 1840	(800-270)	

800-349 Hydra-Clean® 2540 Pressure Washer
800-350 Hydra-Clean® 3240 Pressure Washer
For wiring diagram, see page 16



PARTS LIST

800-349 Hydra-Clean® 2540 Pressure Washer

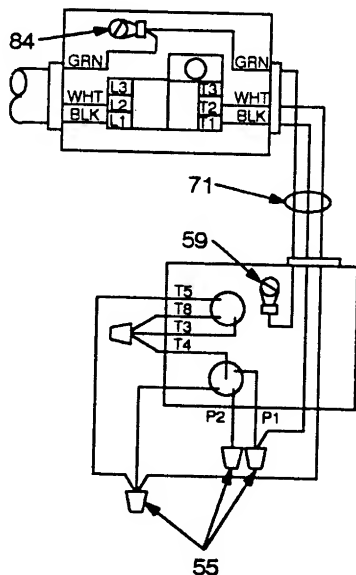
800-350 Hydra-Clean® 3240 Pressure Washer

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1 †	800-346	PUMP & MOTOR ASSEMBLY (see page 17)	1	42 †	800-128	TIP ASSEMBLY, 25 Degree (includes 86, 88)	1
•	800-347	PUMP & MOTOR ASSEMBLY (see page 17)	1	•	800-316	TIP ASSEMBLY, 25 Degree (includes 86, 88)	1
2 †	801-929	CONNECTOR, Sealtight 3/8 x 90 Degree	2	43 †	800-129	TIP ASSEMBLY, 40 Degree (includes 87, 88)	1
•	801-931	CORD GRIP	2	•	800-317	TIP ASSEMBLY, 40 Degree (includes 87, 88)	1
3 †	801-930	CONDUIT, Sealtight 3/8	8 in	44	801-008	DECAL, Graco G	2
•	801-448	CORD, Power 10/4	12 in	45	801-020	NUT, Lock 1/2-13	2
4	803-263	BRACKET, Starter, left	1	46	801-612	WASHER, Flat 1/2	4
5	801-868	NIPPLE, Hex 3/8	1	47	801-550	WHEEL & TIRE ASSEMBLY	2
6	802-732	WASHER, Flat #6	4	48	801-941	SCREW, Cap, hex hd 5/16-18 x 1	4
7	802-731	WASHER, Lock #6	4	49	801-023	WASHER, Flat 5/16	10
8	801-633	NUT, Hex #6-32	4	50	801-025	WASHER, Lock 5/16	11
9	803-083	LABEL, Keep From Freezing	1	51	801-024	NUT, Hex 5/16-18	6
10 †	800-323	UNLOADER, 2500 psi	1	52	801-539	BUMPER	1
•	800-325	UNLOADER, 3200 psi	1	53	802-275	SCREW, Cap, hex hd 5/16-18 x 1-1/2	4
11	800-375	HOSE ASSEMBLY, w/Quick Couplers (includes 14, 18, 20)	1	54	801-382	CORD, Power 12/4	8 ft
12	801-009	QUICK COUPLER, Female 1/4 (includes 13)	1	55	802-811	CORD GRIP	1
13	801-202	O-RING, Female Coupler 1/4	1	56 †	803-256	SWITCH, Starter 7.5 hp 230 Volt	1
14	801-568	QUICK COUPLER, Male 3/8	2	†	803-257	SWITCH, Starter 7.5 hp 460 Volt	1
15	803-142	NIPPLE, Hex 1/2 NPSM x 3/8 NPT	1	•	803-258	SWITCH, Starter 10 hp 230 Volt	1
16	803-141	HOSE, Bypass	1	•	803-259	SWITCH, Starter 10 hp 460 Volt	1
17 †	803-301	LABEL, Model 2540	1	57	801-937	NUT, Lock, electrical	1
•	803-302	LABEL, Model 3240	1	58	801-523	NIPPLE, 1/2 x 2	1
18	801-571	HOSE, High Pressure 50 ft	1	59	801-221	TERMINAL, Ring	1
19	800-392	GUN & WAND ASSEMBLY (incl. 12, 20, 28, 29, 34, 35)	1	60 †	803-228	WIRE, 12 AWG Green	18 in
20	801-569	QUICK COUPLER, Female 3/8 (includes 21)	2	61 †	803-229	WIRE, 12 AWG Red	18 in
21	802-521	O-RING, Female Coupler 3/8	2	62 †	802-809	WIRE, 12 AWG White	18 in
22	402-278	PLUG, Plastic	1	63 †	802-053	WIRE, 12 AWG Black	18 in
23	801-112	STRAINER, Garden Hose	1	64	801-304	TERMINAL, Ring	1
24	801-110	ADAPTER, Garden Hose	1	65	801-226	CONNECTOR, Wire	4
25	801-111	NUT, Garden Hose	1	66	801-367	BUMPER, Rubber	2
26	800-113	FILTER	1	67	801-531	SCREW, Cap, hex hd 3/8-16 x 7	1
27	801-106	TEE, 1/2	1	68	801-499	NUT, Lock 3/8-16	1
28	801-674	SLEEVE, 28"	1	69	801-129	LABEL, Warning, chassis	1
29	801-134	WAND, 32"	1	70	801-388	LABEL, Warning, grounding required	1
30	803-262	BRACKET, Starter, right	1	71	801-902	LABEL, Caution, 10 minute bypass	1
31	800-348	CHASSIS	1	72	801-417	LABEL, Attention, relieve pressure	1
32	800-160	FRONT LEG ASSEMBLY (incl. 67, 68, 74, 75, 76, 77, 78)	1	73	803-007	LABEL, Caution, 230 volt 3 phase	1
33	801-541	HANDLE	1	803-006	LABEL, Caution, 460 volt 3 phase	1	
34	803-350	GUN, Spray	1	74	801-537	LEG, Front	1
35	801-603	NIPPLE, Hex 3/8	1	75	801-506	BOOT	1
36	801-015	WASHER, Flat 3/8	9	76	801-504	BUMPER, Rubber	1
37	801-363	WASHER, Lock 3/8	4	77	801-505	RETAINER, Spring	1
38	801-546	SCREW, Cap, hex hd 3/8-16 x 1-1/4	4	78	801-593	SPRING	1
39	801-548	GROMMET, Rubber	5	79 †	801-640	TIP, 0 Degree	1
40 †	800-131	TIP ASSEMBLY, 0 Degree (includes 79, 88)	1	•	803-106	TIP, 0 Degree	1
•	800-314	TIP ASSEMBLY, 0 Degree (includes 79, 88)	1	80 †	801-667	TIP, 15 Degree	1
41 †	800-137	TIP ASSEMBLY, 15 Degree (includes 80, 88)	1	•	803-107	TIP, 15 Degree	1
•	800-315	TIP ASSEMBLY, 15 Degree (includes 80, 88)	1	†	Model 2540	(800-349)	
				•	Model 3240	(800-350)	

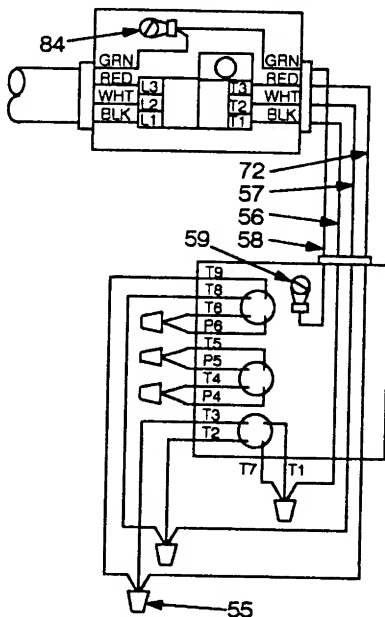
PARTS LIST (Continued) **800-349 Hydra-Clean® 2540 Pressure Washer** **800-350 Hydra-Clean® 3240 Pressure Washer**

REF NO.	PART NO.	DESCRIPTION	QTY
81	801-556	AXLE	1
82	802-140	BRACKET, Supports	1
83	801-227	SCREW, Machine, pan hd #6-32 x 3/4	4
84 †	802-996	PLUG, Locking 7.5 hp, 230 volt	1
•	803-235	PLUG, Locking 10 hp, 230 volt	1
	802-993	PLUG, Locking, 460 volt	1
85	803-186	LABEL, Warning, cordset	1

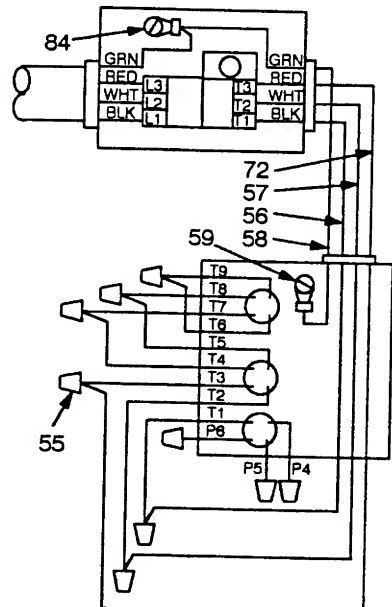
REF NO.	PART NO.	DESCRIPTION	QTY
86 †	801-614	TIP, 25 Degree	1
•	803-108	TIP, 25 Degree	1
87 †	801-615	TIP, 40 Degree	1
•	803-109	TIP, 40 Degree	1
88	801-090	QUICK COUPLER, Male 1/4	4
†	Model 2540	(800-349)	
•	Model 3240	(800-350)	



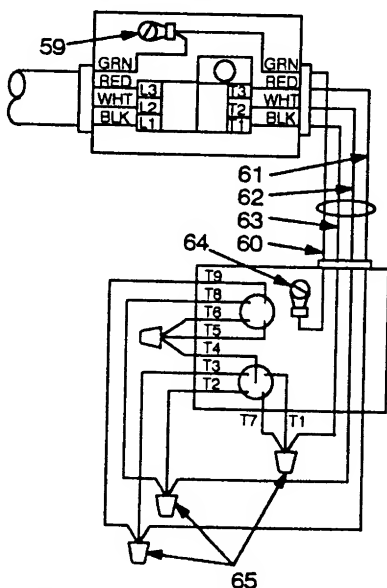
Model 1840 Wiring Diagram
230 Volt, 1 Phase



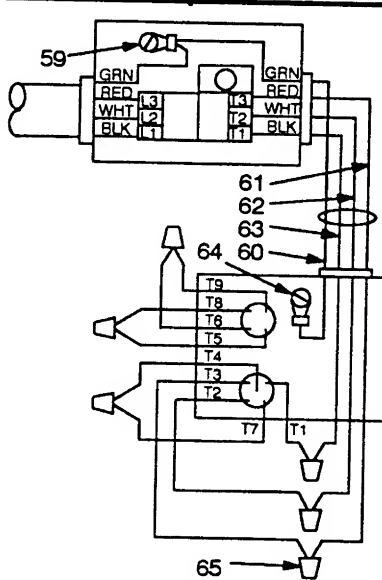
Model 1840 Wiring Diagram
230 Volt, 3 Phase



Model 1840 Wiring Diagram
460 Volt, 3 Phase



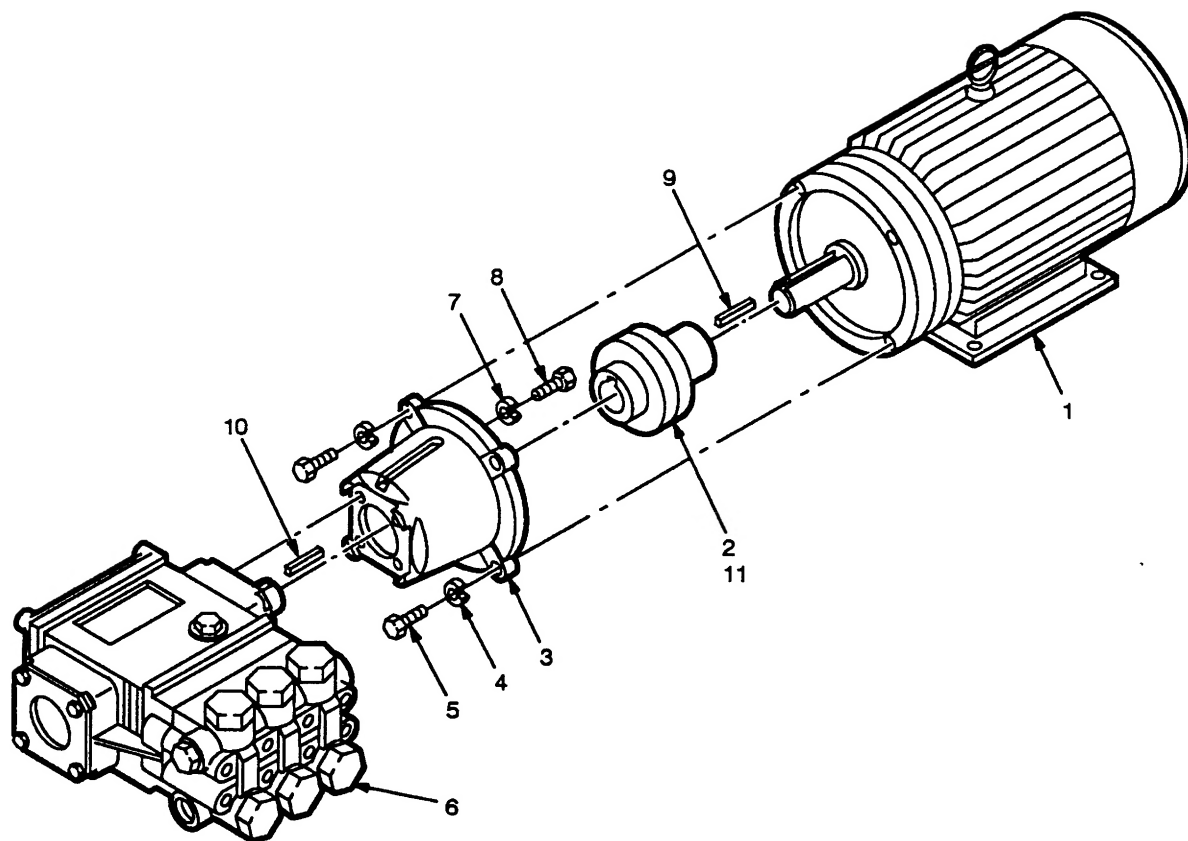
Model 2540 & Model 3240
Wiring Diagram
230 Volt, 3 Phase



Model 2540 & Model 3240
Wiring Diagram
460 Volt, 3 Phase

PARTS DRAWING

800-275 Pump and Motor Assembly (800-270)
 800-343 Pump and Motor Assembly (800-294)
 800-346 Pump and Motor Assembly (800-349)
 800-347 Pump and Motor Assembly (800-350)



PARTS LIST

800-275 Pump and Motor Assembly (800-270)
 800-343 Pump and Motor Assembly (800-294)
 800-346 Pump and Motor Assembly (800-349)
 800-347 Pump and Motor Assembly (800-350)

REF NO.	PART NO.	DESCRIPTION	QTY
1 †	802-920	MOTOR, 5.0 hp TEFC, 3 phase	1
●	803-180	MOTOR, 5.0 hp TEFC, 1 phase	1
■	802-544	MOTOR, 7.5 hp TEFC, 3 phase	1
★	803-216	MOTOR, 10.0 hp TEFC, 3 phase	1
2 †	802-698	COUPLER, 5 hp	1
■★	802-537	COUPLER, 7.5 hp & 10 hp	1
3	802-540	HOUSING	1
4	802-784	WASHER, Lock 1/2	4
5	802-785	SCREW, Cap, socket hd 1/2-13 x 1-1/4	4
6 †	802-142	PUMP (see page 18)	1
■★	803-214	PUMP (see page 18)	1

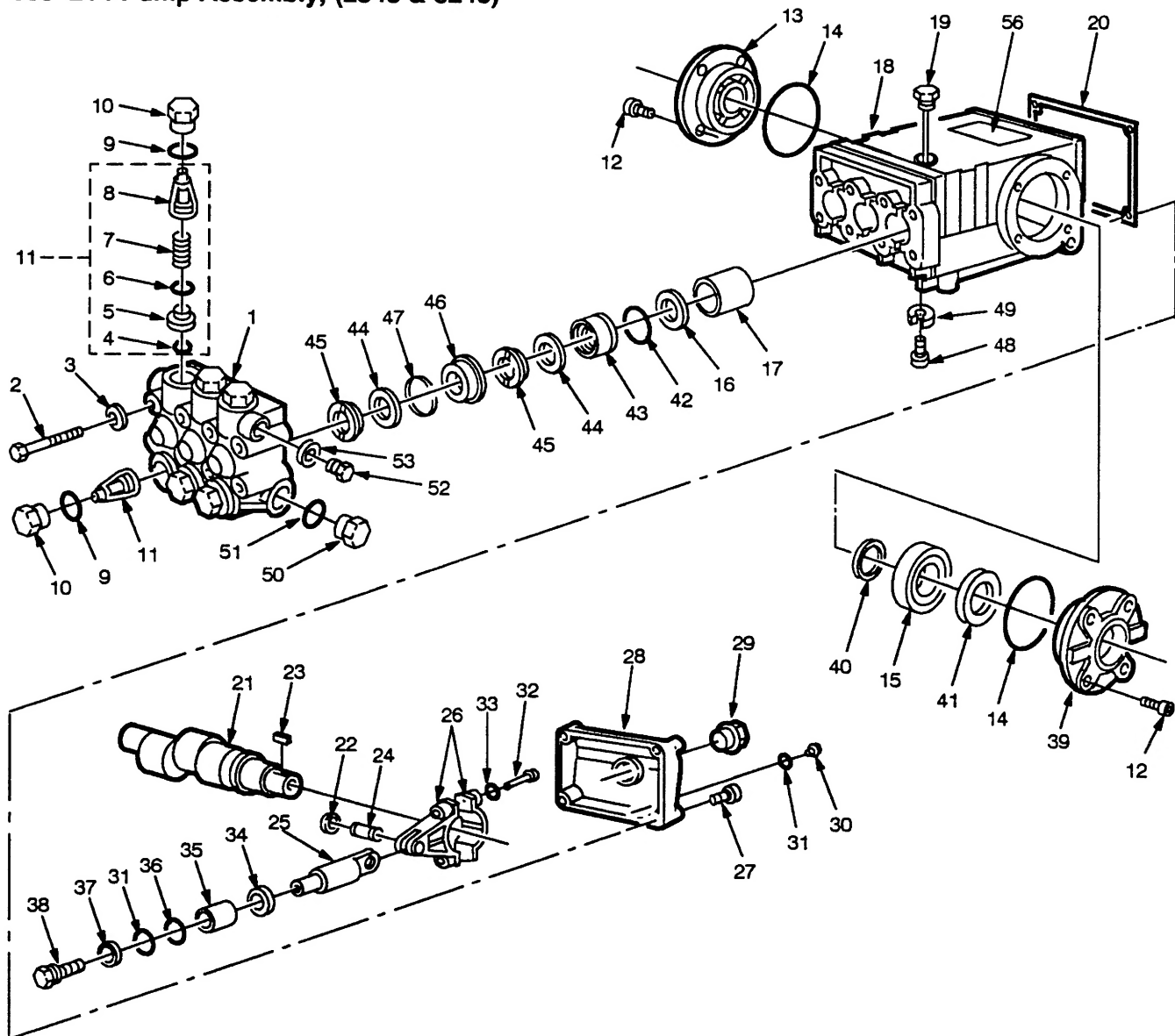
REF NO.	PART NO.	DESCRIPTION	QTY
7	801-025	WASHER, Lock 5/16	4
8	801-559	SCREW, Cap, hex hd M8 x 30	4
9 †	802-783	KEY, Motor, 5 hp	1
■★	803-390	KEY, Motor, 7.5 & 10 hp	1
10	802-794	KEY, Pump	1
11 †	801-887	SPIDER, Coupler, 5 hp	1

† 800-275
 ● 800-343
 ■ 800-346
 ★ 800-347

PARTS DRAWING

802-142 Pump Assembly, (1840)

803-214 Pump Assembly, (2540 & 3240)



PARTS LIST

802-142 Pump Assembly, (1840)

803-214 Pump Assembly, (2540 & 3240)

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	801-467	MANIFOLD, 1840	1	12	803-283	SCREW, Cap, socket hd	8
	801-647	MANIFOLD, 2540 & 3240	1	13	803-284	COVER, Crankcase	1
2	801-468	SCREW, Cap, hex hd	8	14	802-500	O-RING, Crankcase Cover	2
3	801-469	WASHER, Lock	8	15	803-285	BEARING, 1840	2
4	*	O-RING			803-324	BEARING, 2540 & 3240	2
5	*	SEAT, Valve		16	□	SEAL, Oil	
6	*	PLATE, Valve		17	803-286	BUSHING, Piston	1
7	*	SPRING		18	802-895	CRANKCASE	1
8	*	GUIDE, Valve		19	801-475	DIPSTICK	1
9	●	O-RING		20	803-144	GASKET, Cover	1
10	●	CAP		21	803-322	CRANKSHAFT	1
11	*	VALVE ASSEMBLY		22	803-288	RING, Retaining	6

PARTS LIST (Continued)
802-142 Pump Assembly, (1840)
803-214 Pump Assembly, (2540 & 3240)

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
23	802-794	KEY	1	41	*	SEAL, Oil	
24	803-289	PIN, Wrist	3	42	■	O-RING	
25	803-323	GUIDE, Piston, 1840	3	43	■	RETAINER, Packing	
	803-325	GUIDE, Piston, 2540 & 3240	3	44	■†	PACKING	
26	803-291	ROD, Connecting	3	45	■	RING, Head	
27	803-273	SCREW, Cap, socket hd, 1840	5	46	■	RETAINER, Packing	
	803-292	SCREW, Cap, socket hd, 2540 & 3240	5	47	■	RING, Long Life	
28	803-321	COVER, Crankcase, 1840	1	48	802-305	SCREW, Cap, socket hd	2
	803-293	COVER, Crankcase, 2540 & 3240	1	49	802-304	WASHER, Lock	2
29	802-345	GAUGE, Sight	1	50	801-482	PLUG, Hex	1
30	802-793	PLUG, Oil Drain	1	51	801-483	WASHER, Flat	1
31	✓	O-RING		52	801-484	PLUG, Hex	1
32	803-294	SCREW, Cap, socket hd	6	53	801-485	WASHER, Flat	1
33	801-652	WASHER, Lock	6				
34	801-489	WASHER, Flinger	3				
35	801-490	PLUNGER, Ceramic	3				
36	✓	RING, Backup					
37	✓	WASHER					
38	✓	SCREW, Piston					
39	803-295	COVER, Crankcase	1				
40	803-296	SHIM	2				

- * Part of kit 1, 801-472 Valve Kit
- Part of kit 2, 801-473 Oil Seal Kit
- ★ Part of kit 3, 802-511 Crankshaft Seal Kit
- Part of kit 4, 802-306 Valve Cap Kit
- ✓ Part of kit 6, 801-474 Plunger Repair Kit
- † Part of kit 8, 801-486 Packing Kit
- Part of kit 28, 801-487 Packing and Retainer Kit

TECHNICAL DATA

	Model 800-294	Model 800-270	Model 800-349	Model 800-350
Motor (Totally Enclosed Fan Cooled)	5.0 hp, 1 phase	5.0 hp, 3 phase	7.5 hp, 3 phase	10.0 hp, 3 phase
Electrical Service	230 volt/30 amp/1 phase	230 volt/20 amp/3 phase	230 volt/20 amp/3 phase	230 volt/30 amp/3 phase
Optional Service		460 volt/15 amp/3 phase	460 volt/15 amp/3 phase	460 volt/15 amp/3 phase
Water Pump Maximum Working Pressure	1850 psi (128 bar)	1850 psi (128 bar)	2500 psi (172 bar)	3200 psi (220 bar)
Water Pump Maximum Flow	4.0 gpm (15 lpm)	4.0 gpm (15 lpm)	4.0 gpm (15 lpm)	4.0 gpm (15 lpm)
Unit Weight	197 lbs (90 kg)	171 lbs (78 kg)	263 lbs (119 kg)	293 lbs (133 kg)
Dimensions				
Length	39 in (991 mm)	39 in (991 mm)	43 in (1092 mm)	43 in (1092 mm)
Width	21 in (533 mm)	21 in (533 mm)	31 in (787 mm)	31 in (787 mm)
Height	21 in (533 mm)	21 in (533 mm)	25 in (635 mm)	25 in (635 mm)
Maximum Inlet Water Temperature	160° F (70° C)	160° F (70° C)	160° F (70° C)	160° F (70° C)
Inlet Hose Connection	3/4 in garden hose (f)	3/4 in garden hose (f)	3/4 in garden hose (f)	3/4 in garden hose (f)
Wetted Parts				
High Pressure Hose	Acrylonitrile and Buna-N cover and tube			
Bypass Hose	Synthetic yarn and EPDM			
Pressure Washer (including fittings)	Anodized aluminum, Aluminum or Bronze alloys, Brass, Copper, Nylon-Teflon® composite, Ceramic, Buna-N, Cotton Phenolic, 303, 304, and 316 Stainless Steel, Polyimide-12 Thermoplastic, Teflon®, Carbon Steel, Zinc with or without Yellow Chromate Plate			
	<i>Teflon® is a registered trademark of the DuPont Company.</i>			

THE GRACO WARRANTY

WARRANTY AND DISCLAIMERS

Graco warrants all equipment manufactured by it and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. As purchaser's sole remedy for breach of this warranty, Graco will, for a period of twenty four months from date of sale, repair or replace any part of the equipment proven defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for, any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility with Graco equipment of structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective for examination by Graco to verify the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor and transportation.

DISCLAIMERS AND LIMITATIONS

THE TERMS OF THIS WARRANTY CONSTITUTE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AND ARE IN LIEU OF ANY OTHER WARRANTIES (EXPRESS OR IMPLIED), INCLUDING WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY NON-CONTRACTUAL LIABILITIES, INCLUDING PRODUCT LIABILITIES, BASED ON NEGLIGENCE OR STRICT LIABILITY. EVERY FORM OF LIABILITY FOR DIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OR LOSS IS EXPRESSLY EXCLUDED AND DENIED. IN NO CASE SHALL GRACO'S LIABILITY EXCEED THE AMOUNT OF THE PURCHASE PRICE. ANY ACTION FOR BREACH OF WARRANTY MUST BE BROUGHT WITHIN THREE (3) YEARS OF THE DATE OF SALE.

EQUIPMENT NOT COVERED BY GRACO WARRANTY

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motor, switches, hose, etc.) are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

Factory Branches: Atlanta, Chicago, Dallas, Detroit, Los Angeles, West Caldwell (N.J.)
Subsidiary and Affiliate Companies: Canada; England; Switzerland; France; Germany; Hong Kong; Japan

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PRINTED IN U.S.A. 308-510 8/89